

temporary depôt houses, forest guards' huts, mandays or sheds for temporary depôt establishments, &c. :—

No.	Division.						Amount.		
							Rs.	a.	p.
1	North Thána	...	...	...	...	...	747	9	0
2	South Thána	...	...	...	...	...	2,315	8	0
3	East Khándesh	...	...	...	...	...	154	0	0
4	West Khándesh	...	...	...	...	...	888	5	0
5	Násik	...	...	...	...	...	494	3	0
6	Ahmednagar	...	...	...	...	...	1	6	6
7	Poona	...	...	...	...	...	75	5	0
8	Sátára	...	...	...	...	...	36	1	0
9	Sholápur	...	...	...	...	...	.....
10	Surat...	...	...	...	...	...	1,304	7	4
11	Panch Maháls	...	...	...	...	...	270	9	6
Total						...	6,287	6	4

199. The expenditure shown above against South Thána includes the cost, Rs. 1,871, of a bungalow with out-houses purchased at Tánša from Messrs. Glover & Co., contractors of the Tánša lake, under sanction of Government Resolution No. 4171 of the 18th June 1891, for a first rest-house.

(c). OTHER WORKS.

200. The water in the Dángs although obtainable from pure springs is everywhere polluted and rendered unwholesome by the dirty habits of the villagers, and this is possibly one of the causes of the frequent sickness of forest officials and of the population residing in the Dángs. With a view to remedy this evil to some extent, wells with a frame work of wood were built at the undermentioned places in the Dángs at the cost stated :—

				Rs.	a.	p.
Linga ...	...	...	...	11	5	0
Malgaon	...	...	...	10	0	0
Gundohol	...	...	...	10	0	0
Umaria Mahál	...	...	...	10	0	0
Jaran ...	...	...	...	6	0	0
Gulkund	...	...	...	10	0	0
Amthava	...	...	...	15	0	0
Gondal Vahir	...	...	...	10	0	0
				82	5	0

Thus rough wells of good pure spring water were provided in eight different directions within the Dángs for the small expenditure of Rs. 82-5-0. Outlay of this kind carefully directed cannot fail to be highly profitable to the State in the health of its servants employed in malarious localities, and to be beneficial to the local population.

CHAPTER IV.

OUTTURN AND WORKING.

I.—DEPARTMENTAL OPERATIONS.

(1).—TIMBER.

201. The outturn in cubic feet of timber exploited departmentally from the forests of the different divisions of the Northern Circle, with the cost incurred

and the amount realised by its sale during the year under report, as compared with the results of the year preceding, is given in the following statement:—

No.	Division.	1890-91.					1891-92.				
		Timber in the rough; logs.	Timber in the rough; poles.	Miscel- laneous.	Cost.	Receipts.	Timber in the rough; logs.	Timber in the rough; poles.	Miscel- laneous.	Cost.	Receipts.
		C. ft.	C. ft.	C. ft.	Rs.	Rs.	C. ft.	C. ft.	C. ft.	Rs.	Rs.
1	North Thána ...	.....	1,788	...	204	213	.....	10,839	...	2,346	2,175
2	South Thána ...	.....	58,824	...	1,714	8,086	.....	17,247	...	987	2,532
3	East Khándesh ...	.....	21,300	...	1,465	13,947	.....	19,532	...	1,339	10,448
4	West Khándesh ...	28,763	26,456	29,073	3,296	36,376	11,003	66,997	67,812	4,153	48,985
5	Násik ...	40,006	.....	.....	318	2,667	.....	26,802	.....	206	3,103
6	Ahmednagar ...	.....	179,156	319	1,627	9,509	.....	35,098	92	1,261	7,977
7	Poona ...	.....	51,678	.....	3,369	26,012	.....	50,785	.....	3,088	26,130
8	Sátara ...	.....	21,060	.....	1,385	8,189	.....	20,041	.....	1,470	13,618
9	Sholapur ...	1,310	220	...	24	361	831	.....	.....	5	80
10	Surat ...	65,850	58,514	...	81,305	54,949	104,020	72,645	.....	14,715	48,136
11	Panch Maháls...	13,292	4,368	8,594	1,340	3,233	.....	24,464	951	996	4,197
	Total ...	155,286	420,364	37,956	46,067	1,64,147	115,954	344,450	68,855	30,571	167,391

202. The departmental fellings in the North Thána division were made in five coupes out of 23 unsold coupes of the year, not with the object of adding to the revenue of the division, but to give effect to the orders of Government contained in their Resolution No. 650 of the 26th January 1891, which direct that the unsold coupes should be exploited departmentally in the interest of the people of the district; but the result was that there was absolutely no demand for the material felled in two coupes out of the five; this material consequently remained unsold; while the material in the other three coupes fetched poor prices, which barely repaid the expenses of exploitation.

203. The departmental fellings in South Thána during the year were made for the same reason, *viz.*, in consequence of the coupes having remained unsold; but in view of the failure of such sales in the year preceding, only two coupes were selected for departmental fellings, and these were in the Kalyán taluka. In addition to this, trees remaining on foot along the Tansa Duct strip (90 feet broad) were felled at the instance of the Bombay Municipality, and were sold by auction for Rs. 215.

204. The revenue authorities, on being referred to on the point, informed that it was not necessary in the interests of local supply to exploit departmentally the remaining unsold coupes, as local supply would be satisfied without the material of these coupes being felled: and the Collector intimated to the Divisional Forest Officer that it was not necessary to work any other coupes departmentally than those determined.

205. The treatment of the forests does not prescribe the exploitation of the coupes on the system of working adopted because the timber contained within the coupes and to be felled is mature, and its time for removal has arrived; the coupe is put into the market chiefly to meet the demands of local supply; the trees felled are not mature; on the other hand, many of the trees felled are diseased and bad, and require to be removed to make room for a better growth; but taking any coupe as a whole, nothing is lost to the proprietor by not cutting out the trees other than the standards in the year of its proper turn under the revolution: what may appear to be a loss of income at first sight, is more than made up by the annual progressive increment of wood giving enhanced value to the coupe in a future year.

206. The difference in outturn and receipts in the East Khándesh division was due to the fact that a larger quantity of teak timber was extracted from the Jámner teak numbers in the year 1890-91 than in the year under report; while the prices of the material at auction sales, which are regulated by the condition of the cotton harvest of the district, were poor owing to the failure of the cotton crop, and consequently there was a decrease of Rs. 3,499 upon the revenue of the preceding year.

207. The increase in outturn of timber and in receipts in the West Khándesh division was, to a great extent, due to extensive clearances of timber upon the cultivation areas within defined Bhil settlements in the North Tápti ranges,

and upon revenue waste and occupied lands, which were required to be freed of timber growth as quickly as possible.

208. In the Deccan divisions of Násik, Ahmednagar and Poona, the departmental operations were undertaken on the same lines as usual, and the variations in cost and receipts are so very small that they call for no special explanations.

209. In the Sátára division departmental operations of timber were undertaken in all the ranges except Tásgaon where the timber is bábul, and Mahábálëshvar where the forests are ever-green with the jámbul tree predominating. The material felled secured better prices at auction sales than during the year before, and hence the increase of Rs. 5,429 in the revenue from this source.

210. No departmental timber operations of importance were undertaken in the Sholápur Division, where workable forests of bábul, created within the last 20 years, have been differentiated into blocks, which are sub-divided into compartments, one of which is formed into a coupe annually for sale standing to contractors and purchasers.

211. The small difference in cost and receipts of the Surat division is explainable by the fact that no departmental fellings of green teak were undertaken in the Dángs, on account of there being a large stock on hand from the preceding year. 1,316 khandis were carted in addition from Khubita to the Wagrech and Vejalpur depôts by contractors on behalf of the department, at the rate of Rs. 4-6-0 and Rs. 5-2-0 respectively, the total cost amounting to Rs. 5,764. Owing to the persistent combination of traders, the auction sales of timber in the Wagrech depôt did not succeed again this year as well as was expected, and consequently the greater portion of the sales had to be effected retail; the different logs of timber in the depôt were marked with their prices, so that intending purchasers might select such lots as they required. In this manner the total sales from the depôt amounted to 2,218 khandis of $12\frac{1}{2}$ cubic feet, which realised Rs. 30,990, giving a very satisfactory and high average rate of Rs. 14 per khandi or Rs. 56 per ton of 50 cubic feet, and returning a considerable profit.

212. Taking the selling rate *in situ*, in the Dángs, at Rs. 7 per khandi at the outside, and adding Rs. 4-8-0 for conveyance, &c., to the coast, the prices in the Dángs and at the coast compare in the proportion of Rs. 11-8-0 to Rs. 14, or Rs. 2-8-0 per khandi in favour of the Wagrech depôt. The quantity, 2,218 khandis, disposed of from the coast depôt, multiplied by this difference, *viz.*, Rs. 2-8-0, gives a net profit of Rs. 5,545 during the year, as the gain by opening the coast depôt at Wagrech near Billimora, which possesses a tidal bandar upon the estuary of Káveri and Ambiká rivers, and a railway station on the B. B. & C. I. line. The outlay of Rs. 1,455 in purchasing land for this depôt in a more suitable situation to serve the conveniences of the trade has therefore been fully justified.

213. In Mándvi, too, the department had to contend against a combination of the local wood-dealers, who have their head-quarters at Kadod; to defeat which a great portion of the timber felled departmentally had to be floated down the Tápti river to Fulpada near Surat, as was once done during 1889-90, to a temporary sale depôt, where it was disposed of by auction successfully. With the coast depôt established at Wagrech for the sale of Dáng timber, the department is now in a better position to hold its own footing against combinations of timber merchants, and to realise its annual revenue, which used to be a matter of uncertainty formerly. The clearing of coppice wood undergrowth within a radius of one mile round the town of Mándvi was also undertaken during the year at a cost of Rs. 878 and the timber sold for Rs. 3,963. A small increase in outturn and receipts of the Panch Maháls division as regards departmental operations is due to better prices at auction sales.

(2).—FIREWOOD.

214. The outturn in cubic feet of firewood, including the loppings of teak and other trees cut departmentally in the several divisions of the Northern

Circle, together with the cost incurred and the amount realised, as compared with the results of the preceding year, is given in the following statement:—

No.	Division.	1890-91.			1891-92.		
		Firewood.	Cost.	Receipts.	Firewood.	Cost.	Receipts.
		Cubic Feet.	Rs.	Rs.	Cubic Feet.	Rs.	Rs.
1	North Thána ...	6,675	58	281	79,602	633	415
2	South Thána ...	76,237	126	523	...	...	2
3	East Khándesh ...	302,760	2,078	11,868	404,910	2,999	14,230
4	West Khándesh ...	146,435	2,005	2,986	385,562	1,836	11,014
5	Násik ...	251,829	1,119	3,831	227,984	1,150	3,795
6	Ahmednagar ...	19,223	24	759	154,818	...	755
7	Poona ...	206,203	1,271	4,393	81,081	356	1,796
8	Sátára ...	69,798	781	2,210	244,920	1,343	4,230
9	Sholápur ...	17,749	141	1,140	15,130	100	1,293
10	Surat ...	...	...	...	18,491	...	501
11	Panch Maháls ...	278,974	...	3,396	210,700	...	3,718
	Total ...	1,375,888	7,603	31,387	1,859,198	8,417	41,749

215. No departmental fellings of firewood were undertaken in the two forest divisions of Thána. In the East Khándesh division the increase in out-turn, cost and receipts is due to the clearing of disforested lands at the foot of the Sátápda hills, under Government Resolution No. 3563, dated 25th May 1891, in the Revenue Department. The departmental fellings of firewood in the West Khándesh division were undertaken in two ranges, Dhulia and Nizámpur; while in other ranges firewood operations were confined to loppings of trees felled for timber. The increase of Rs. 8,028 is due to the fact that all the firewood that was on hand from last year was sold during the year, there being a large demand for it. The production, cost and receipts from firewood in the divisions of Násik and Ahmednagar during the year are pretty nearly the same as those of last year, and call for no remarks. The decrease in the Poona division is due to less firewood being exploited departmentally, coupe sales taking the place of departmental exploitation; while the increase in Sátára is due to a better market for firewood. Practically no departmental fellings of firewood were undertaken in the divisions of Sholápur, Surat and Panch Maháls, but the loppings and branches of trees felled for timber were classed as firewood and sold as such. No departmental operations were undertaken as regards bamboos and sandalwood.

(3) —OTHER MINOR PRODUCE.

216. The departmental collection of hirda, the fruit of terminalia chebula, comes under this sub-head; and the following statement will exhibit the results during the year in the divisions of North and South Thána, Násik, Ahmednagar, Poona and Sátára, as compared with those of the year preceding:—

No.	Division.	Yield.		Cost.		Receipts.		REMARKS.
		1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	
		K. m. lbs.	K. m. lbs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
1	North Thána ...	35 0 0	70 3 0	497 8 0	550 0 0	1,770 4 0	Credited under II e. Do. do.
2	South Thána ...	71 23 16	143 7 0	501 15 2	980 3 0	2,029 10 10	4,249 8 0	
3	Násik ...	49 2 0	49 0 0	28 11 3	21 8 5	1,453 11 8	1,431 0 0	
4	Ahmednagar ...	102 13 6	106 3 20	758 14 3	851 8 9	3,350 13 2	3,100 0 0	
5	Poona ...	161 2 26	265 5 8	.....	.....	2,914 0 0	6,080 13 1
6	Sátára ...	675 1 20	741 10 13	4,418 13 4	5,096 11 11	16,308 15 2	19,409 9 2	
	Total ...	1,084 15 12	1,369 1 13	5,708 6 0	7,447 13 1	26,607 2 10	36,041 2 3	

217. The system of collecting hirda departmentally was reverted to in the North Thána division with good results, the collection being made by wild tribes as usual. In the South Thána division hirda was collected departmentally as in the year before, and although the hirda crop was only an average one, still the revenue derived was the highest on record, owing to better prices ruling the auction sales. A small quantity of hirda was collected departmentally in the Násik division in the Peint range, at a cost of Rs. 9-4-0, which realised Rs. 30-8-0;

in the other ranges, it was collected on the share system as usual. The small decrease in outturn and receipts in Ahmednagar call for no remarks.

218. In the Poona division hirda was collected on the share system, while in the Sátára division it was gathered departmentally; and the results are very satisfactory in both divisions, owing to a greater demand for this myrobalan of commerce, and in consequence to the better prices attending the departmental auction sales.

II.—REMOVAL OF PRODUCE BY PURCHASERS.

(1).—TIMBER.

219. The outturn, in cubic feet, of timber removed from the forests of the several divisions of the Northern Circle, by consumers and purchasers at their own expense, is exhibited in the following statement, with the amounts realized, as compared with the results of the previous year :—

No.	Division.	1890-91.				1891-92.			
		Timber in the rough ; logs.	Timber in the rough ; poles.	Miscellaneous.	Amount realized.	Timber in the rough ; logs.	Timber in the rough ; poles.	Miscellaneous.	Amount realized.
		C. ft.	C. ft.	C. ft.	Rs.	C. ft.	C. ft.	C. ft.	Rs.
1	North Thána ...	...	1,125,498	...	2,69,773	...	970,950	...	250,307
2	South Thána ...	...	1,610,172	...	1,19,251	...	563,670	...	96,413
3	East Khándesh ...	242,700	...	...	4,929	213,000	...	...	4,354
4	West Khándesh ...	...	...	123,888	10,110	...	...	213,750	8,884
5	Násik ...	387,169	...	...	16,817	641,262	...	...	33,488
6	Ahmednagar ...	...	...	1,045	243	...	...	305	158
7	Poona ...	97,645	93	...	202	193,632	142	...	235
8	Sátára ...	1,391	473	...	778	...	2,230	...	801
9	Sholápur ...	...	...	130	124	...	...	129	176
10	Surat ...	34,899	1,883	281,700	37,786	...	...	...	33,320
11	Panch Maháls ...	218,202	50,787	61,185	47,247	2,307	17,117	17,772	55,230
	Total ...	982,006	2,788,906	467,948	5,07,260	1,050,201	1,554,109	231,956	4,83,366

220. In the North Thána division 160 coupes, laid out in different blocks of the Working Plans series, by the Surveyors of the Working Plans Branch, were offered for sale, but out of them 136 only found purchasers. In the South Thána Division 102 new coupes and 21 unsold coupes of the previous year excluding the Karjat and Khálápur ranges, were offered for sale, and 98 were sold. The average price per acre in North Thána remained unchanged, but in the South Thána division it went below the average of the preceding year, owing to the unfavourable situation of the coupes, the inferior quality of the material they contained, and to some extent to the Railway Company having enforced their traffic rules more strictly, by enhancing the cost of transport per waggon-load of timber.

221. On the whole, the coupe system in Thána has been very successful, but it may happen that for some years to come all the coupes offered for sale will not attract purchasers; however, if some coupes do remain unsold and unexploited, it does not follow that it is a matter for regret, so long as local supply is not affected; the timber unmarked in the coupes for being felled and removed is not mature and does not deteriorate or depreciate by keeping for a year or two longer; the system of working applied to the Thána forests is a compulsory one owing to the presence of certain local conditions or factors. If coppice at a certain age does not sell, it does not harm by being given a longer period of existence, unless it has been grown specially to produce a rafter or a pole of certain dimensions or age. Rules 21 and 22 of the rules of September 6th, 1892, published under Section 75 (a) of the Forest Act, prescribe how unsold coupes are to be treated.

222. In the two divisions of the Khándesh Collectorate there is a greater falling off this year than ever, and this is attributed to the general depression caused in trade by the partial failure of the staple crop of the district and the price of cotton having ruled low.